Chipsmall

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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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Miniature WiFi (802.11b/g/n) Module: For Raspberry Pi and more

PRODUCT ID: 814
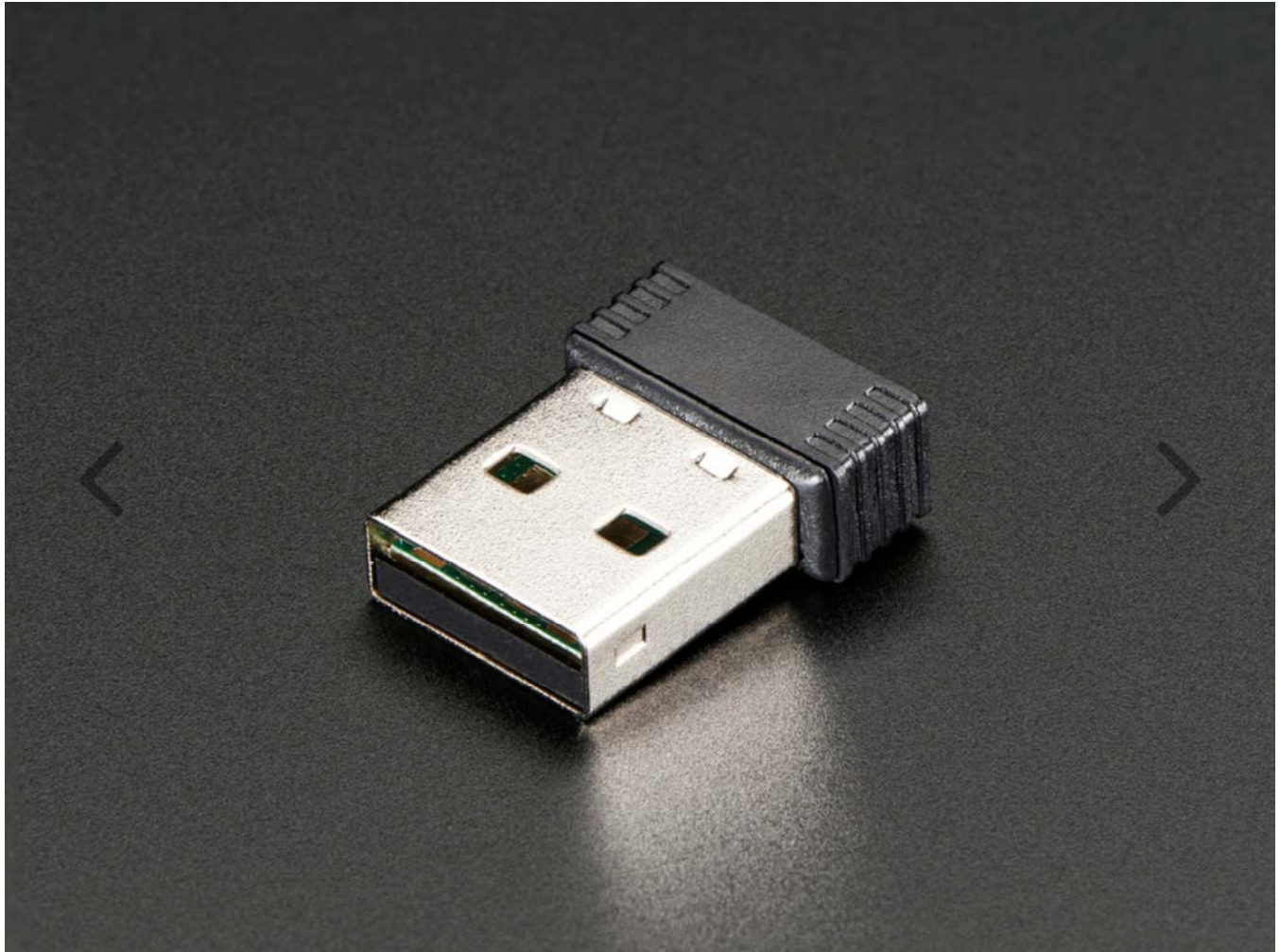
DESCRIPTION   −

Make your Internet of Things device cable-free by adding WiFi. Take advantage of the Raspberry Pi and Beagle Bone's USB port to add a low cost, but high-reliability wireless link. We tried half a dozen modules to find one that works well with the Pi and Bone without the need of recompiling any kernels: its supported by the Bone's Angstrom/Debian installation that comes with each Bone as well as Raspbian and just about any other modern Pi operating system. You'll have wireless Internet in 10 minutes! Works great with 802.11b/g/n networks.

If using with a Beagle Bone: Because of the high power required by WiFi, a 5V 2A power adapter is required to power both the Bone and WiFi. Flaky behavior and crashes may result if this is not followed! We have a tutorial for using this module with the Beagle Bone!

If using with a Raspberry Pi: The latest Raspbian distributions support this module out-of-the-box. Check out our detailed tutorial for how to set up WiFi networking on the Pi If you have a model B you may find that you need to have a powered hub to use this adapter, so if you're having power flakiness with your Pi, try a hub!

Please note: These are good for home/office usage with a Raspberry Pi when the router is nearby. For installation projects or large-scale distribution, we strongly recommend upgrading to this stick with a larger antenna − especially if you plan on putting the Pi behind something or inside an enclosure/wall/box/sign/etc!

The WiFi module may look slightly different than above, but all modules shipped contain the same chipset and have equivalent performance, the only difference is the plastic shell and any printing. We have requested to minimize packaging and now ship without a CD since all modern computers have support built in. If you need drivers, see the Technical Details tab

Technical Details

RTl8192/8188CUS Chipset
Sticks out 8mm (0.3") beyond USB port
Weight: 2.17g

Wireless Standards: IEEE 802.11n (draft), IEEE 802.11g, IEEE 802.11b
Host Interface: High speed USB2.0/1.1 interface
Data Rate: 802.11n: up to 150Mbps (downlink) and up to 150Mbps (uplink) , 802.11g: 54 / 48 / 36 / 24 / 18/ 12 / 9 / 6 Mbps auto fallback, 802.11b: 11 / 5.5 / 2 / 1 Mbps auto fallback
Frequency Band: 2.4GHz ISM (Industrial Scientific Medical) Band
Chipset: Realtek
RF Frequency: 2412 ~ 2462 MHz (North America), 2412 ~ 2472 MHz (Europe), 2412 ~ 2484 MHz (Japan)
Radio Channel: 1 ~ 14 channels (Universal Domain Selection)
Range Coverage: Up to 3 times farther range than 802.11g
Antenna Type: Integrated Antenna
Roaming: Full mobility and seamless roaming from cell to cell
RF Output Power: 13 ~17 dBm (Typical)
Modulation: 11n: BPSK, QPSK, 16QAM, 64QAM with OFDM, 11g: BPSK, QPSK, 16QAM, 64QAM, OFDM, 11b: DQPSK, DBPSK, DSSS, CCK
Data Security: 64/128-bit WEP Encryption
WPA, WPA-PSK, WPA2, WPA2-PSK. TKIP/AES
Network: Auto-switch to use 802.11n or 802.11g or 802.11b mode
Supports Ad-Hoc, Infrastructure WLAN network, Wireless roaming, Data rate auto fall-back under noisy environment or longer range distance, Site Survey with Profile function
Configuration & Management: Plug-and-Play setup and installation, Management Utility supports 2000 / XP/ Vista
Media Access Control CSMA/CA with ACK
LED Indicator Link/Active (Blue)
Operating Temperature 0℃ to 40℃
Storage Temperature -20℃ to 75℃
Operating Humidity 10% ~ 90% (Non Condensing)
Storage Humidity 5% ~ 95% (Non Condensing)
Requirements: Available USB 2.0 port
Download drivers (shouldn't be necessary but in case) from this site, look for the RTL8188CUS download table